UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,169	03/29/2006	Christian Scheering	2003P07837WOUS	4121

22116 7590 12/21/2009

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER	
CHACKO, JOE	
ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
12/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,169	SCHEERING, CHRISTIAN	
	Examiner	Art Unit	
	JOE CHACKO	2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-16 and 18-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-16 and 18-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Applicant's amendments filed on 7/8/2009 . Claims 9-16, 18 have been amended. Claims 9-16 and 18-29 have been examined and are pending. Claims 19-29 have been newly added.

Response to Arguments

2. Applicant's arguments filed on claims 1, 16 and 18 have been fully considered but they are not persuasive.

a. In response to the Applicant's argument that the Shrivastava reference does not teach or suggest prevention of availability request transmissions by predefinable other clients, the Examiner respectfully disagrees with the argument.

The Shrivastava reference does disclose the systems wherein if there is a failure with one of the systems in the cluster it is verified and then transmission to the shared devices are disabled and thus preventing transmission of availability information from the systems in the cluster and the communications manager in the cluster. (column 5, lines 15-37). The Applicant's specification describes a similar process in monitoring the receipt of messages of other clients and also preventing transmission of availability requests by the control program which is similar to the function of the communications manager. (page 8, lines 10-27). For this reason, contrary to the Applicant's argument, the Jung reference in view of the Shrivastava reference does disclose the limitation of the claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 20 and 26** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "negative server availability message" and "negative multicast availability message" was not originally recited in the specification. Therefore the Applicant is required to remove this term from the claim and for examination purposes this term will not be considered.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 9-11 and 13-16, 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (U.S. Patent Pub. No. 2002/0129150 AI) in view of Shrivastava et al. (U.S. Patent No. 6,163,855)

As to **claim 9**, Jung discloses a method for verifying an availability of a server (fig.15,346, transmitting service availability of a server) comprising:

transmitting an availability request by a **first** client (fig.15, 10, MN) to the VPN server(fig.15, 50, VPN server) ([0071]; where the MN sends requests the VPN service from the VPN server through the home agent);

the first client receiving a response to the availability request (fig.15, step 348);

Jung does not disclose transmitting a message regarding an availability of the server by the client to other clients to prevent a transmission of the availability request to the server for a predefinable period of time and to calculate the predefinable period of time between availability requests.

In an analogous art, Shrivastava et al. does discloses a method wherein **the first client** transmitting a message (column 5, lines 29-30; wherein one systems detects a communication failure with one of the systems and broadcasts a message to the cluster) regarding an availability of the server (fig.2, 60, system) to a plurality of predefinable other clients; and

preventing a transmission of **any** availability requests (column 5, lines 25-37; wherein a regroup event is initiated and during which writes to potentially shared devices are disabled until the membership has stabilized) by the plurality of predefinable other clients to the server for **at least** a **prescribable** period of **time**.

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify the method disclosed by Jung with the method disclosed by Shristastava et al. to disclose a method of transmitting messages to another peer entities in the network. The motivation behind this modification is to ensure consistency of nodes in the cluster. (Shrivastava et al., column 2, lines 24-26)

As to **claim 10**, Jung-Shrivastava et al. discloses the method as claimed in 9, wherein the method is used for verifying the availability of the server in a packet-oriented communication network (fig.12; wherein the figure explicitly describes the process the detecting whether a service provided by a VPN server is available)

As to **claim 11**, Jung-Shrivastava et al.-Yu discloses a method wherein data is transmitted between the server (Jung,fig.12, VPN server) and clients (Jung,fig.12, MN)

by a connectionless switch control (Jung, [0067]; wherein the data transmitted takes place through a VPN network including routers)

As to **claim 13**, Jung-Shristastava does discloses a method wherein the client (Shrivastava, fig.2, 60, system) informs only the other clients (Shrivastava, fig. 2, 60, other systems) within a same subnetwork (Shrivastava, fig.2, 58, cluster) regarding the availability of the server. (Shrivastava, column 5, lines 26-37; wherein the system detecting the communication failure of another system in the cluster sends out a message to the other members of the cluster regarding the failure)

As to **claim 14**, Jung-Shristastava et al-Yu discloses the method as claimed in claim 9, wherein the client (home agent) executes the availability requests at a time which is predefined by a timer . (Jung, [0072]; wherein the timer sets a time period for which the MN is located in the FA)

As to **claim 15**, Jung-Shristastava et al-Yu discloses the method, wherein the timer is set every time to a predefinable value when the message regarding the availability of the server is received at the HA. (Jung, [0073]; wherein the timer is set a predetermined time and failure to receive a reply signal within the time period)

As to **claim 16**, this is a computer program corresponding to method in claim 9. Therefore it has been analyzed and rejected based upon method in claim 9.

As to **claim 18**, this is a system corresponding to method in claim 9. Therefore it has been analyzed and rejected based upon method in claim 9.

As to **claim 19**, Jung-Shrivastava discloses the method of claim 9 further comprising the first client checking to determine whether the server is at least able to respond to the availability request with an unavailability message if no confirmation message is received by the first client. (Shrivastava, column 5, lines 25-37; the system

in the cluster check to determine if there is a communication failure and if a system does not respond the system is considered failed)

As to **claim 20**, Jung-Shristava discloses the method of claim 9 further comprising the first client transmitting a negative server availability message to the predefinable other clients if the server provided an unavailability message or if the server did not respond to the availability request within a predetermined amount of time after the availability request was sent to the server. (Shrivastava, column 5, lines 25-37; the system in the cluster check to determine if there is a communication failure and if a system does not respond the system is considered failed)

As to **claim 21**, Jung-Shrivastava discloses the method of claim 9 further comprising the first client receiving keep alive data from the predefinable other clients.(Jung, [0072]; the HA receives the data about VPN service availability and transmits it to the FA)

As to **claim 22**, Jung–Shrivastava discloses the method of claim 9 further comprising one of the predefinable other clients transmitting a collective availability request to the server if no multicast collective request has been received by that client within a predefined time period. (Jung, [0067]; the HA waits to receive a reply with the authentication lifetime, and transmits the information is transmitted to the MN)

As to **claim 23**, this is a method corresponding to method in claim 21. Therefore it has been analyzed and rejected based upon method in claim 21.

As to **claim 24**, Jung-Shrivastava discloses the client of claim 18 further comprising a fourth device configured to monitor for receipt of a message from one of the predefinable other clients regarding availability of the server. (Jung, [0067]; the CPE router monitors the messages from the HA regarding the availability of the server)

As to **claim 25**, this is a program corresponding to method in claim 21. Therefore it has been analyzed and rejected based upon method in claim 21.

As to **claim 26**, this is a program corresponding to method in claim 20. Therefore it has been analyzed and rejected based upon method in claim 20.

As to **claim 27**, Jung- Shrivastava discloses the client of claim 18 wherein the first device is also the third device and the first device is a transmitter or a transmission mechanism.(Jung, [0067]; the HA then acts as a transmitter of availability request)

As to **claim 28**, Jung-Shrivastava discloses the client of claim 18 wherein the first device, second device and third device are interconnected portions of the client. (Shrivastava, column 5, lines 25-37; the systems in the cluster are connected together)

As to **claim 29**, Jung-Shrivastava discloses the client of claim 18 further comprising a fourth device configured to monitor for reception of a message from a prescribable further client about server availability (Jung, [0067]; the CPE router monitors the messages from the HA regarding the availability of the server) and also configured to prevent transmission of an availability request to the server at least for a prescribable time interval after receipt of such a message. (Shrivastava, column 5, lines 25-37; wherein a regroup event is initiated and during which writes to potentially shared devices are disabled until the membership has stabilized)

7. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (U.S. Patent Pub. No. 2002/0129150 AI) in view of Shrivastava et al (U.S. Patent No. 6,163,855) further in view of Chen et al.(U.S. Patent Pub. No. 2002/016964 AI)

As to **claim 12**, Jung and Shrivastava as modified does not explicitly disclose the transmitting of a multicast message to the other clients in the network

In an analogous art, Chen explicitly discloses the method wherein message regarding the availability of the server is transmitted to the plurality of predefinable other clients using a multicast message.essage to inform other clients in the cluster about server availability information. ([0046] , [0056]; wherein when a node fails the cluster node sends information about the failure to other nodes using a multicast message).

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify the method disclosed by Jung as modified with the method disclosed by Chen et al. to disclose a method of transmitting messages to another peer entities in the network using multicast messages. The motivation behind this modification is to provide high availability and reliability among the nodes. (Chen, page 4, [0056])

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOE CHACKO whose telephone number is (571)270-3318. The examiner can normally be reached on Monday-Friday 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C./
Examiner, Art Unit 2456

/Bunjob Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2456